

Work Order ID 149051

Tuesday, July 19, 2016 10:17:21 AM

149051

PD 160525
PRELIMINARY ISSUE

Page 1

Item ID: D206-642-521PHI  Accept *N900040100* Setup Start *NS1*
Revision ID: PRELIM Stop *NS2*
Item Name: Skidtube LH,High Gear, Standard Wearplates, DART (Apical) Tri-Bag Float Compatible
Start Date: 7/19/2016 Start Qty: 1.00 *1* Cust Item ID:
Required Date: 7/27/2016 Req'd Qty: 1.00 *1* Customer:
Reference:

Approvals: Process Plan: DAS 21 9-89 Date: JUL 19 2016 Tooling: _____ Date: _____ Run Start *NR1*
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr	DAS	JUL 26 2016			DAS			
IIN-D206-642	Q	6 9-89	" " 7 6 2016			21 9-89	1607-27		
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile and create labels per PPP D206-642-521								
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.01							
Quality Control									

B141157

AUG 25 2016

PC **DAS 27 9-89** **JUL 27 2016**

AUG 25 2016

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Work Order ID 149051

Tuesday, July 19, 2016 10:17:21 AM

149051

Page 2

Item ID: D206-642-521PHI
 Revision ID: PRELIM
 Item Name: Skidtube LH, High Gear, Standard Wearplates, DART (Apical) Tri-Bag Float Compatible

Accept

N900040100

Setup Start ***NS1***

Stop ***NS2***

Start Date: 7/19/2016 Start Qty: 1.00 ***1***
 Required Date: 7/27/2016 Req'd Qty: 1.00 ***1***

Cust Item ID:
 Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00							
130									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D206-642-511 Location: _____								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.02							
Quality Control									

DAS
27
9-89
AUG 2 5 2016

DAS
21
9-89
AUG 2 5 2016

DAS
21
9-89
AUG 2 5 2016

POSITIVE RECALL
 EFFECTIVE 11/27/22 AUTH
 RELEASED DATE 11/28/24
 per DST 9749

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐						
Date : _____		Step #: _____		QTY Effective : _____		*MRB (QSI042) Approval _____		
Description Work Order Deviation				Disposition				
								Completed By _____
								Lead hand / Supervisor Approval Verification _____
								QC / QA Coordinator Approval _____
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐						
OTHER : ☐ _____								

Picklist Print

Tuesday, July 19, 2016 10:17:24 AM

Page 1

Work Order ID: 149051

149051

Parent Item: D206-642-521PHI

D206-642-521PHI

Parent Item Name: Skidtube LH, High Gear, Standard Wearplates, DART (Apical) Tri-Bag Float Compatible

Start Date: 7/19/2016

Required Date: 7/27/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 14.09.23 NEW ISSUE LL VERF:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

AN5C15A		Purchased	No				Each	23.0000		1			
---------	--	-----------	----	--	--	--	------	---------	--	---	--	--	--

AN5C15A

Bolt

DAS
28
9-89

Location

Loc Qty

Loc Code

over003

20

M135058

20

ST337

3

M130466

3

D206-642-561PHI

Manufactured No

D206-642-561PHI

Replacement Skidtube, High Gear, Standard Wearplates, DART (Apical) Tri-Bag Float Compatible

D206-648-013PHI

Manufactured No

D206-648-013PHI

Ground Handling Wheel Modification

NAS1149C0532R

Purchased No

NAS1149C0532R

WASHER

Location

Loc Qty

Loc Code

GA

60

116513

60

ST260a

200

m135056

200

ST266

92

m134756

92

D2932-1PHI

Manufactured No

D2932-1PHI

Saddle LH Out, 206

DAS
28
9-89

**

B149994

AUG 19 2016

DAS
27
9-89

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PC

DAS
27
9-89

B147157

DAS
27
9-89

X B147486

DAS
27
9-89

X M134756

DAS
27
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause			FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____				
Misidentified ☐	Past Due ☐					

Picklist Print

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Page 2

Work Order ID: 149051

149051

Parent Item: D206-642-521PHI

D206-642-521PHI

Parent Item Name: Skidtube LH,High Gear, Standard Wearplates, DART (Apical) Tri-Bag Float
Compatible

Start Date: 7/19/2016

Required Date: 7/27/2016

D2933-1PHI

Manufactured No

Each 0.0000

Start Qty: 1.00

Required Qty: 1.00

D2933-1PHI

Saddle LH In 206

D2938-1PHI 28

Manufactured No

Each 0.0000

D2938-1PHI

Saddle LH Out 206

D2939-1PHI 28

Manufactured No

Each 0.0000

D2939-1PHI

Saddle LH In 206

AN3C41A 28

Purchased No

Each 302.0000

AN3C41A

Bolt

DAS
28
9-89

Location

Loc Qty

Loc Code

FG	10	
122843	5	
124975	1	
m130081	4	
OVER002	225	
m132169	75	
m132381	75	
m132522	75	
ST347	67	
131651	67	

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1

1

1

8

149992

149987

149985

DAS

6

9-89

DAS

27

9-89

AUG 19 2016

DAS

6

9-89

DAS

6

9-89

DAS

27

9-89

DAS

27

9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Picklist Print

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Page 3

Work Order ID: 149051

149051

Parent Item: D206-642-521PHI

D206-642-521PHI

Parent Item Name: Skidtube LH,High Gear, Standard Wearplates, DART (Apical) Tri-Bag Float
Compatible

Start Date: 7/19/2016

Required Date: 7/27/2016

D2652

Manufactured No

Each

477.0000

Start Qty: 1.00

16

Required Qty: 1.00

D2652

Bushing

**

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

FG	45
31985	45
ST009	124
147559	124
ST012a	308
145959	308

Each

976.0000

20

**

DAS
27
9-89

MS21043-3

Purchased

No

MS21043-3

Nut

Location

Loc Qty

Loc Code

FG	80
103691	80
FP001	11
m130673	11
GA	237
m133990	237
OVER007	400
m135058	400
ST302	142
m134861	142
ST304	106
m131340	106

DAS
28
9-89

JUL 27 2016

20

Tuesday, July 19, 2016 10:17:24 AM

Shop Packet Print

Page 3

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐						
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval			
Description Work Order Deviation				Disposition				Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Root Cause		FAULT CATEGORY								
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐			Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐			Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
		OTHER : _____								

Picklist Print

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Work Order ID: 149051

149051

Parent Item: D206-642-521PHI

D206-642-521PHI

Parent Item Name: Skidtube LH, High Gear, Standard Wearplates, DART (Apical) Tri-Bag Float
Compatible

Start Date: 7/19/2016

Required Date: 7/27/2016

D3672-7

Manufactured No

Each

803.0000

Start Qty: 1.00

24

Required Qty: 1.00

D3672-7

Washer, Phenolic

**

PC
DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

FG	40	
129987	25	
133986	15	
ST049	263	
142572	263	29
ST051A	500	
147220	500	

AN5C11A

Purchased No

Each

116.0000

4

AN5C11A

Bolt

**

PC
DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

FG	4	
103715	4	
over003	40	
M135058	40	
ST338	72	
M131305	22	29
M131624	50	

JUL 27 2016

Tuesday, July 19, 2016 10:17:24 AM

Shop Packet Print

Page 4

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QS1042) Approval Completed By _____ Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		

Picklist Print

Tuesday, July 19, 2016 10:17:24 AM

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Work Order ID: 149051

149051

Parent Item: D206-642-521PHI

D206-642-521PHI

Parent Item Name: Skidtube LH, High Gear, Standard Wearplates, DART (Apical) Tri-Bag Float
Compatible

Start Date: 7/19/2016

Required Date: 7/27/2016

AN4C6A

Purchased

No

Each

345.0000

Start Qty: 1.00

12

Required Qty: 1.00

AN4C6A

Bolt

**

PC DAS 27 9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

FG	14	
103344	4	
121657	10	
ST345	331	
m134502	6	
m134861	75	
m134955	150	
m135127	100	

12

D3672-3

Manufactured

No

Each

717.0000

24

D3672-3

Washer, Phenolic

**

PC DAS 27 9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

FG	100	
133083	52	
134449	48	
FP001	213	
132639	213	
ST049	404	
142571	13	
146277	391	

24

JUL 27 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

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Work Order ID: 149051

149051

Parent Item: D206-642-521PHI

D206-642-521PHI

Parent Item Name: Skidtube LH,High Gear, Standard Wearplates, DART (Apical) Tri-Bag Float
Compatible

Start Date: 7/19/2016

Required Date: 7/27/2016

NAS1149C0432R

Purchased

No

Each

Start Qty: 1.00
977.0000

Required Qty: 1.00

NAS1149C0432R

WASHER

**

24

XM135297PC

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

801

m125807

427

m134676

374

ST266

176

m134676

176

MS21043-4

Purchased

No

Each

753.0000

12

MS21043-4

Nut

**

PC DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

FG

40

104603

40

GA

17

m132803

17

OVER007

300

m134754

300

ST302

396

m134502

96

m134943

300

JUL 27 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : ☐									

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QS042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

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Work Order ID: 149051

149051

Parent Item: D206-642-521PHI

D206-642-521PHI

Parent Item Name: Skidtube LH,High Gear, Standard Wearplates, DART (Apical) Tri-Bag Float Compatible

Start Date: 7/19/2016

Required Date: 7/27/2016

D3456-1

Manufactured No

Each

87.0000

Start Qty: 1.00

Required Qty: 1.00

D3456-1

Washer

**

1

PC DAS 27 9-89

Location

Loc Qty

Loc Code

FG

7

25701

7

ST037

5

144158

5

ST038A

75

147066

25

147799

50

1

2

2

PC DAS 27 9-89

D2935

Manufactured No

Each

69.0000

D2935

Saddle Spacer

**

2

Location

Loc Qty

Loc Code

FG

6

31793

6

ST014

63

146008

33

147574

30

2

2

PC DAS 27 9-89

D3457-1

Manufactured No

Each

108.0000

D3457-1

Washer

**

2

Location

Loc Qty

Loc Code

FG

10

32409

10

ST037

98

145625

98

2

JUL 27 2016

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
OTHER : ☐									

Picklist Print

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Work Order ID: 149051

149051

Parent Item: D206-642-521PHI

D206-642-521PHI

Parent Item Name: Skidtube LH, High Gear, Standard Wearplates, DART (Apical) Tri-Bag Float Compatible

Start Date: 7/19/2016

Required Date: 7/27/2016

AN3C36A

Purchased

No

Each

240.0000

Start Qty: 1.00

9

Required Qty: 1.00

AN3C36A

Bolt

DAS
28
9-89

Location

Loc Qty

Loc Code

FG	47	
101261	4	
122204	2	
m131367	1	
m132169	40	
FP001	80	
m131856	1	
m132381	79	
OVER002	80	
m133916	80	
ST347	33	
m132522	33	

Each

47.0000

3

AN3C35A

Purchased

No

AN3C35A

Bolt

DAS
28
9-89

Location

Loc Qty

Loc Code

FG	4	
18914	4	
ST347	43	
M132317	18	
M133694	25	

3

JUL 27 2016

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

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Work Order ID: 149051

149051

Parent Item: D206-642-521PHI

D206-642-521PHI

Parent Item Name: Skidtube LH, High Gear, Standard Wearplates, DART (Apical) Tri-Bag Float Compatible

Start Date: 7/19/2016

Required Date: 7/27/2016

NAS1149C0332R

Purchased

No

Each

Start Qty: 1.00
3,118.000

Required Qty: 1.00
24

NAS1149C0332R

WASHER

DAS
28
9-89

Location

Loc Qty

Loc Code

FP001

1686

m135046

1686

GA

141

m133284

141

ST266

1291

m134736

1291

Each

992.0000

24

**

D3672-1

Manufactured

No

D3672-1

Washer, Phenolic

DAS
28
9-89

Location

Loc Qty

Loc Code

FG

10

85222

10

FP001

482

112218

8

134785

474

ST049

500

147077

500

Each

35.0000

2

**

D3396-3

Manufactured

No

D3396-3

Bushings

DAS
28
9-89

Location

Loc Qty

Loc Code

ST034

35

132598

12

147439

23

2

JUL 27 2016

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Page 10

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
				Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
				Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
				Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
				Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
				Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
				Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
				Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
				OTHER : _____			

Picklist Print

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Work Order ID: 149051

149051

Parent Item: D206-642-521PHI

D206-642-521PHI

Parent Item Name: Skidtube LH, High Gear, Standard Wearplates, DART (Apical) Tri-Bag Float Compatible

Start Date: 7/19/2016

Required Date: 7/27/2016

AN5C35A

Purchased

No

Each

61.0000

Start Qty: 1.00

Required Qty: 1.00

AN5C35A

Bolt

DAS
28
9-89

Location

Loc Qty

Loc Code

ST336

61

M129871

61

Each

123.0000

**

AN5C32A

Purchased

No

AN5C32A

BOLT

DAS
28
9-89

Location

Loc Qty

Loc Code

FG

4

18918

4

over004

100

131650

100

ST336

19

m132102

19

DAS
27
9-89

DAS
27
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause			FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : ☐				
Misidentified ☐	Past Due ☐					

Picklist Print

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Work Order ID: 149051

149051

Parent Item: D206-642-521PHI

D206-642-521PHI

Parent Item Name: Skidtube LH,High Gear, Standard Wearplates, DART (Apical) Tri-Bag Float
Compatible

Start Date: 7/19/2016

Required Date: 7/27/2016

AN5C34A

Purchased

No

Each

104.0000

Start Qty: 1.00

2

Required Qty: 1.00

AN5C34A

Bolt

PC

DAS
28
9-89

Location

Loc Qty

Loc Code

FG

2

18918

2

over004

88

m131855

8

m131856

8

m132169

8

m132381

8

m132522

8

m132674

8

m133332

8

m133917

8

m133920

8

m133921

8

m134131

8

ST336

14

m130033

14

4

MS21043-5

Purchased

No

Each

162.0000

4

PC

MS21043-5

Nut

DAS
28
9-89

Location

Loc Qty

Loc Code

FG

20

101418

20

GA

76

116548

76

ST302

66

m135157

66

4

JUL 27 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER :							

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D206-642 REV. Q AND INSTRUCTIONS FOR CONTINUED
AIRWORTHINESS ICA-D206-642 REV. 6 OR LATER APPROVED REVISION

REF. FAA STC: SA00475SE

REF. TCCA STC: SH98-4

REF. EASA STC: EASA.IM.R.S.01320

PURPOSE:

TO ADD D206-642-521/-522 SKIDTUBE INSTALLATIONS WITH WEARPADS ONLY AS
PREFERRED BY SOME CUSTOMERS.

PARTS LIST:

PARTS LIST OF SECTION 4.7 OF IIN-D206-642 REV. Q AND SECTION 32.17 OF ICA-D206-642
REV. 6 IS AMENDED AS SHOWN BELOW TO REFLECT THE ADDITION OF D206-642-521/-522/-
561 CONFIGURATIONS.

ITEM	Qty -521	Qty -522	Qty -561	Part Number	Description
	X			D206-642-521	FLOAT SKIDTUBE INSTALLATION, LH
		X		D206-642-522	FLOAT SKIDTUBE INSTALLATION, RH
	1	1	X	D206-642-521-561- 521	FLOAT SKIDTUBE
	1	1		D206-648-013	GROUND HANDLING KIT
1			1	D3274-045	SKIDTUBE ASSEMBLY
3			1	D2646	* AFT CAP (1)
4			2	AN3C4A	* BOLT (1)
5A			2	NAS1149C0332R	* WASHER (1)
5B			2	D3672-1	* WASHER (1)
20A			9	D3537-9	* WEARPAD (1)
21A			1	D3537-11	* WEARPAD (1)
26A			40	AN3C4A	* BOLT (1)
26B			40	NAS1149C0332R	* WASHER (1)
26C			40	ALS7-1032-130	* INSERT (1)
34			1	MS27039C4-06	* SCREW (1)
35			1	NAS1149C0463	* WASHER (1)
6	1			D2932-1	SADDLE, FWD OUT, LH
6		1		D2932-2	SADDLE, FWD OUT, RH
7	1			D2933-1	SADDLE, FWD IN, LH
7		1		D2933-2	SADDLE, FWD IN, RH
8	1			D2938-1	SADDLE, AFT OUT, LH
8		1		D2938-2	SADDLE, AFT OUT, RH
9	1			D2939-1	SADDLE, AFT IN, LH
9		1		D2939-2	SADDLE, AFT IN, RH

A	NEW ISSUE	AK	16.05.30
REV.	DESCRIPTION	BY	DATE
DESIGN	AK	DART AEROSPACE USA, INC. EUGENE, OR	
DRAWN	AK		
CHECKED	<i>[Signature]</i>	DRAWING NO. REV. A DSI 9749	
MFG. APPR.	N/A		
APPROVED	<i>[Signature]</i>	TITLE SCALE ADD -521/-522/-561 SKIDTUBES NTS	
DE APPR.	<i>[Signature]</i>		
DATE	16.05.30	COPYRIGHT © 2016 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

The skid tubes are approved per released DSI 9749 Rev.A and can be shipped.

However, I see that the DSI was amended and the skid tube part number is now -561 (not -541). Any customer sticker references -541 needs to be changed to -561. The top level part numbers (-521/-522) are unchanged.

The latest paperwork that includes DSI 9749 also needs to be in the kit.

Get Outlook for Android

From: Denis Maranda

Sent: Tuesday, August 23, 11:39 AM

Subject: PHI parts requiring engineering release.

To: Chris Provencal

Cc: William Monterroza

We need to ship the following PHI parts ASAP to Broussard. We are waiting for engineering release (+ve recall?).

D206-642-541 PHI wo 147157 kit D206-642-521 PHI wo 149051

D206-642-541 PHI wo 147155 kit D206-642-522 PHI wo 149054

Can you give us the OK?

Denis Maranda

Director of Operations

DART AEROSPACE

T 1 613 632-5200 > 255

F 1 613 632-5246

C 1 514 941-8922

1 800 556- 4166

www.dartaerospace.com

Linda Lacelle

From: Denis Maranda
Sent: Wednesday, August 24, 2016 9:56 AM
To: Linda Lacelle
Subject: FW: PHI parts requiring engineering release.

From: Denis Maranda
Sent: Wednesday, August 24, 2016 9:51 AM
To: Linda Corriveau <lcorriveau@dartaero.com>
Subject: FW: PHI parts requiring engineering release.

From: Sonia Quirion
Sent: Tuesday, August 23, 2016 12:53 PM
To: Denis Maranda <dmaranda@dartaero.com>
Subject: Re: PHI parts requiring engineering release.

OK

From: Denis Maranda
Sent: August 23, 2016 12:34:37 PM
To: Sonia Quirion
Subject: FW: PHI parts requiring engineering release.

From: Denis Maranda
Sent: Tuesday, August 23, 2016 11:57 AM
To: Lori Morris <lmorris@dartaero.com>
Subject: FW: PHI parts requiring engineering release.

Sonia was looking for an approval from engineering to release her kits .

Looks like we are Ok to ship provided the skid tube part number is revised???

Did the DSI came out after we had issued the WO?

From: Chris Provencal
Sent: Tuesday, August 23, 2016 11:04 AM
To: Denis Maranda <dmaranda@dartaero.com>
Cc: William Monterroza <wmonterroza@dartaero.com>; Melanie Fauteux <mfauteux@dartaero.com>; Shirley Hay <shay@da>
Subject: Re: PHI parts requiring engineering release.

FW: PHI parts requiring engineering release.

DM

Denis Maranda

Tue 12:34 PM

Sonia Quirion ▾

📧 Reply all | ▾

Inbox

You replied on 2016-08-23 12:52 PM.

📧 Reply all | ▾ 🗑 Delete Junk | ▾ ...

From: Denis Maranda**Sent:** Tuesday, August 23, 2016 11:57 AM**To:** Lori Morris <lmaris@dartaero.com>**Subject:** FW: PHI parts requiring engineering release.

Sonia was looking for an approval from engineering to release her kits .

Looks like we are Ok to ship provided the skid tube part number is revised???

Did the DSI came out after we had issued the WO?

From: Chris Provencal**Sent:** Tuesday, August 23, 2016 11:04 AM**To:** Denis Maranda <dmaranda@dartaero.com>**Cc:** William Monterroza <wmonterroza@dartaero.com>; Melanie Fauteux <mfauteux@dartaero.com>; Shirley Hay <shay@dartaero.com>**Subject:** Re: PHI parts requiring engineering release.

The skid tubes are approved per released DSI 9749 Rev.A and can be shipped.

However, I see that the DSI was amended and the skid tube part number is now -561 (not -541). Any customer sticker, decal, or paperwork that references -541 needs to be changed to -561. The top level part numbers (-521/-522) are unchanged.

The latest paperwork that includes DSI 9749 also needs to be in the kit.

Get Outlook for Android**From:** Denis Maranda**Sent:** Tuesday, August 23, 11:39 AM**Subject:** PHI parts requiring engineering release.**To:** Chris Provencal**Cc:** William Monterroza

We need to ship the following PHI parts ASAP to Broussard. We are waiting for engineering release (+ve recall?).

D206-642-541 PHI wo 147157 kit D206-642-521 PHI wo 149051

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Can you give us the OK?

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Director of Operations

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REFERENCE ONLY

DAS
28
9-89

ITEM	Qty -521	Qty -522	Qty -561	Part Number	Description
	X			D206-642-521	FLOAT SKIDTUBE INSTALLATION, LH
		X		D206-642-522	FLOAT SKIDTUBE INSTALLATION, RH
			X	D206-642-561	FLOAT SKIDTUBE
10	8	8		AN3C41A	BOLT
11	16	16		D2652	BUSHING
12A	8	8		MS21043-3	NUT
12B	16	16		D3672-7	WASHER
13	4	4		AN5C11A (or AN5C12A)	* BOLT (2)
14	4	4		AN5C11A (or AN5C13A)	* BOLT (2)
15A	8	8		NAS1149C0532R	WASHER
15B	8	8		D3672-7	WASHER
16	12	12		AN4C6A	BOLT
17A	24	24		D3672-3	WASHER
17B	24	24		NAS1149C0432R	WASHER
18	12	12		MS21043-4	NUT
37	10	10		D2712	SET SCREW
38	2	2		D2934	SADDLE SPACER
39	2	2		D2935	SADDLE SPACER
50	9	9		AN3C36A	BOLT
51	3	3		AN3C35A	BOLT
52	24	24		NAS1149C0332R	WASHER
53	24	24		D3672-1	WASHER
54	12	12		MS21043-3	NUT
55	2	2		D3396-3	SPACER
56A	1	1		AN5C35A	BOLT
56B	1	1		AN5C15A	BOLT
60	2	2		AN5C32A	BOLT
61	2	2		AN5C34A	BOLT
62	4	4		MS21043-5	NUT

- NOTES: (1) DENOTES THAT PART IS INCLUDED WITH D3274-045 ASSEMBLY ABOVE
(2) CHOICE OF BOLT WILL DEPEND ON CROSSTUBE (SEE INSTALLATION PROCEDURE)

DESIGN	AK	DART AEROSPACE USA, INC. EUGENE, OR	
DRAWN	AK		
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9749	SHEET 2 OF 3
APPROVED		TITLE	SCALE
DE APPR.		ADD -521/-522/-561 SKIDTUBES NTS	
DATE	16.05.30	COPYRIGHT © 2016 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D206-642 REV. Q AND INSTRUCTIONS FOR CONTINUED
AIRWORTHINESS ICA-D206-642 REV. 6 OR LATER APPROVED REVISION

REF. FAA STC: SA00475SE
REF. TCCA STC: SH98-4
REF. EASA STC: EASA.IM.R.S.01320

DAS
28
9-89

PURPOSE:

TO ADD D206-642-521/-522 SKIDTUBE INSTALLATIONS WITH WEARPADS ONLY AS
PREFERRED BY SOME CUSTOMERS.

PARTS LIST:

PARTS LIST OF SECTION 4.7 OF IIN-D206-642 REV. Q AND SECTION 32.17 OF ICA-D206-642
REV. 6 IS AMENDED AS SHOWN BELOW TO REFLECT THE ADDITION OF D206-642-521/-522/-
561 CONFIGURATIONS.

ITEM	Qty -521	Qty -522	Qty -561	Part Number	Description
	X			D206-642-521	FLOAT SKIDTUBE INSTALLATION, LH
		X		D206-642-522	FLOAT SKIDTUBE INSTALLATION, RH
	1	1	X	D206-642-521-561-4	FLOAT SKIDTUBE
	1	1		D206-648-013	GROUND HANDLING KIT
1			1	D3274-045	SKIDTUBE ASSEMBLY
3			1	D2646	* AFT CAP (1)
4			2	AN3C4A	* BOLT (1)
5A			2	NAS1149C0332R	* WASHER (1)
5B			2	D3672-1	* WASHER (1)
20A			9	D3537-9	* WEARPAD (1)
21A			1	D3537-11	* WEARPAD (1)
26A			40	AN3C4A	* BOLT (1)
26B			40	NAS1149C0332R	* WASHER (1)
26C			40	ALS7-1032-130	* INSERT (1)
34			1	MS27039C4-06	* SCREW (1)
35			1	NAS1149C0463	* WASHER (1)
6	1			D2932-1	SADDLE, FWD OUT, LH
6				D2932-2	SADDLE, FWD OUT, RH
7	1			D2933-1	SADDLE, FWD IN, LH
7		1		D2933-2	SADDLE, FWD IN, RH
8	1			D2938-1	SADDLE, AFT OUT, LH
8		1		D2938-2	SADDLE, AFT OUT, RH
9	1			D2939-1	SADDLE, AFT IN, LH
9		1		D2939-2	SADDLE, AFT IN, RH

A	NEW ISSUE	AK	16.05.30
REV.	DESCRIPTION		BY DATE
DESIGN	AK	DART AEROSPACE USA, INC. EUGENE, OR	
DRAWN	AK		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9749	SHEET 1 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	ADD -521/-522/-561 SKIDTUBES NTS	
DATE	16.05.30	COPYRIGHT © 2016 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

Work Order ID 149051

Tuesday, July 19, 2016 10:17:21 AM

149051

FOLLOWING TOOL

Item ID: D206-642-521PHI

Revision ID: PRELIM

Item Name: Skidtube LH, High Gear, Standard Wearplates, DART (Apical) Tri-Bag Float Compatible

Start Date: 7/19/2016 Start Qty: 1.00

Required Date: 7/27/2016 Req'd Qty: 1.00

Reference:

Approvals: Process Plan: DAS 21 9-89 Date: JUL 19 2016

QC: DAS 21 9-89 Date: JUL 19 2016

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr		JUL 26 2016						
IIN-D206-642	Q	DAS 8 9-89	JUL 26 2016			DAS 21 9-89		JUL 27 2016	

100

100

DC

Doc.Control -USB or Paperwork

Document Control

DOCUMENT CONTROL

0.00

0.00

Memo

Photocopy bluefile and create labels per PPP D206-642-511 CHG006

CHG 001

DAS

21

9-89

see attached

110

110

Packaging

Packaging

Pick Kit

Memo

0.00

0.00

QC- 100% Inspect kits for completeness

0.00

120

120

QC

Quality Control

Memo

0.01

Change Record

PAGE 1 OF 1

Part Number: D206-642-521PHI/-522PHIDescription: FLOAT SKIDTUBE , LH/RH[illegible]

Linda Lacelle

From: David Shepherd
Sent: Thursday, August 25, 2016 12:08 PM
To: Linda Lacelle
Cc: Lori Morris
Subject: RE: PHI parts requiring engineering release.

Linda,

Sorry for the slow reply. DSI 9748/9749 were approved by the FAA and released several weeks ago, so I am OK with you signing off the Positive Recall on Work Orders for PHI.

Regards,
David

From: Linda Lacelle
Sent: August-23-16 11:05 AM
To: David Shepherd <dshepherd@dartaero.com>
Cc: Lori Morris <lmorris@dartaero.com>
Subject: FW: PHI parts requiring engineering release.
Importance: High

Hi David,
Since Chris and Will are not here, can you give me the ok to sign off the positive recall for these w/o's. they were stamped positive recall, waiting on the release of the DSI, and now that they are ready to package, we would like to get these moving...
Thx
L

From: Lori Morris
Sent: Tuesday, August 23, 2016 1:03 PM
To: Linda Lacelle <llacelle@dartaero.com>
Subject: FW: PHI parts requiring engineering release.

From: Lori Morris
Sent: Tuesday, August 23, 2016 1:01 PM
To: Denis Maranda <dmaranda@dartaero.com>
Subject: RE: PHI parts requiring engineering release.

Hi Denis,

The work orders were updates manually to pull the -541PHI, as these were started before the DSI was released.

We are now building -561PHI for all future orders, as the DSI was only released at the end of July.

Thanks
Lori

From: Denis Maranda
Sent: Tuesday, August 23, 2016 11:57 AM
To: Lori Morris <lmorris@dartaero.com>
Subject: FW: PHI parts requiring engineering release.

Sonia was looking for an approval from engineering to release her kits .

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Subject: Re: PHI parts requiring engineering release.

The skidtubes are approved per released DSI 9749 Rev.A and can be shipped.

However, I see that the DSI was amended and the skidtube part number is now -561 (not -541). Any customer sticker, decal, or paperwork that references -541 needs to be changed to -561. The top level part numbers (-521/-522) are unchanged.

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